Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-12. (Canceled)

13. (Currently amended) A method for activating a ~~postynaptic~~ postsynaptic membrane of a cell, comprising contacting the cell with an effective amount of a biglycan therapeutic, such that the ~~postsynpatic~~ postsynaptic membrane is activated.

14. (Original) The method of claim 13, wherein the biglycan therapeutic activates MuSK on the cell.

15. (Original) The method of claim 13, wherein the biglycan therapeutic potentiates agrin-induced phosphorylation of MuSK.

16. (Original) The method of claim 13, wherein the biglycan therapeutic upregulates utrophin levels.

17. (Original) A method for treating or preventing a condition associated with an abnormal dystrophin-associated protein complex (DAPC) in cells of a subject, comprising administering to the subject a pharmaceutically effective amount of biglycan therapeutic.

18. (Original) The method of claim 17, wherein the biglycan therapeutic activates MuSK on the cell.

19. (Original) The method of claim 17, wherein the biglycan therapeutic binds to MuSK.

20. (Original) The method of claim 17, wherein the biglycan therapeutic upregulates utrophin levels.

21. (Original) The method of claim 17, wherein the condition is a muscular dystrophy selected from the group consisting of Duchenne's MuscularDystrophy, Becker's Muscular Dystrophy, Congenital Muscular Dystrophy, Limb-girdle Muscular Dystrophy, and mytonic dystrophy.

22. (Original) A method for treating or preventing a condition characterized by an abnormal neuromuscular junction or synapse in a subject, comprising administering to the subject a pharmaceutically effective amount of biglycan therapeutic.

23. (Original) A method for determining whether a subject has or is at risk of developing a condition associated with an abnormal DAPC or abnormal synapse or neuromuscular junctions, comprising determining the level or activity of biglycan, wherein the presence of an abnormal level and/or activity of biglycan in the tissue of a subject indicates that the subject has or is at risk of developing a condition associated with an abnormal DAPC or abnormal neuromuscular junctions.

24. (Original) The method of claim 23, wherein the condition is a muscular dystrophy.

25. (Original) The method of claim 24, wherein the condition is selected from the group consisting of Duchenne's Muscular Dystrophy ,Becker's Muscular Dystrophy, Congenital Muscular Dystrophy, Limb-girdle Muscular Dystrophy, and mytonic dystrophy.

26. (Original) A composition comprising a pharmaceutically efficient amount of biglycan therapeutic that is sufficient for stabilizing DAPCs or activating postsynatpic membranes.

27. (Original) A method for identifying an agent which modulates the interaction between α-dystroglycan and biglycan, comprising contacting an α-dystroglycan peptide with biglycan or a portion thereof sufficient for binding to α-dystroglycan and a test compound in conditions under which the α-dystroglycan peptideand biglycan interact in the absence of the test compound, wherein a difference in the level of binding between the α-dystroglycan peptideand biglycan in the presence of the test compound relative to the absence of the test compound indicates that the test compound is an agent which modulates the interaction between α-dystroglycan and biglycan.

28. (Original) A method for identifying an agent which modulates the interaction between α-sarcoglycan and biglycan, comprising contacting an α-sarcoglycan peptide with biglycan or a portion thereof sufficient for binding to α-sarcoglycan peptide and a test compound in conditions under which the α-sarcoglycan peptide and biglycan interact in the absence of the test compound, wherein a difference in the level of binding between the α-sarcoglycan peptide and biglycan in the presence of the test compound relative to the absence of the test compound indicates that the test compound is an agent which modulates the interaction between α-sarcoglycan and biglycan.

29. (Original) A method for identifying an agent which modulates the interaction between α-dystroglycan and a sarcoglycan component, comprising contacting an α-dystroglycan peptide with the sarcoglycan component or a portion thereof sufficient for binding to α-dystroglycan and a test compound in conditions under which the α-dystroglycan peptide and the sarcoglycan component interact in the absence of the test compound, wherein a

difference in the level of binding between the α-dystroglycan peptide and the sarcoglycan component in the presence of the test compound relative to the absence of the test compound indicates that the test compound is an agent which modulates the interaction between α-dystroglycan and the sarcoglycan component.

30. (Original) A method for identifying an agent which modulates the interaction between MuSK and biglycan, comprising contacting biglycan with MuSK or a portion thereof sufficient for binding to biglycan and a test compound in conditions under which biglycan and MuSK interact in the absence of the test compound, wherein a difference in the level of binding between the biglycan and MuSK in the presence of the test compound relative to the absence of the test compound indicates that the test compound is an agent which modulates the interaction between biglycan and MuSK.

31. (Original) A method for identifying a compound which modulates the biglycan-induced phosphorylation of a sarcoglycan in a cell, comprising contacting a cell which expresses MuSK and the sarcoglycan with a biglyan polypeptide and test compound and determining the level of phosphorylation of the sarcoglycan, wherein an difference in the level of phosphorylation of sarcoglycan in the presence relative to the absence of the test compound indicates that the test compound modulates biglycan-induced phosphorylation of the sarcoglycan.

32. (New) The method of claim 13, wherein the biglycan therapeutic is a polypeptide including a biglycan amino acid sequence which is at least about 90% identical to SEQ ID No. 9, or a portion thereof.

33. (New) The method of claim 32, wherein the biglycan therapeutic binds to MuSK.

34. (New) The method of claim 32, wherein the biglycan amino acid sequence includes one or more Leucine Rich Repeats (LRRs) of human biglycan having SEQ ID NO: 9.

35. (New) The method of claim 32, wherein the polypeptide is derivatized with one or more glycosaminoglycan (GAG) side chains.

36. (New) The method of claim 32, wherein the biglycan amino acid sequence is at least about 90% identical to amino acids 38-365 of SEQ ID NO: 9.

37. (New) The method of claim 32, wherein the biglycan amino acid sequence is at least about 95% identical to amino acids 38-365 of SEQ ID NO: 9.

38. (New) The method of claim 32, wherein the cell is a muscle cell.